CONTENTS FOR VOLUME 53

NUMBER 1—JANUARY

SURVIVAL RATES OF BOBWHITE QUAIL BASED ON BAND RECOVERY ANALYSES ..... Kenneth H. Pollock, Clinton T. Moore, William R. Davidson, Forest E. Kellogg, and Gary L. Doster 1

SURVIVAL ANALYSIS IN TELEMETRY STUDIES: THE STAGGERED ENTRY DESIGN ..... Kenneth H. Pollock, Scott R. Winterstein, Christine M. Bunck, and Paul D. Curtis 7

HABITAT USE, HOME RANGE, AND SURVIVAL OF TERRITORIAL MALE RUFFED GROUSE ..... Frank R. Thompson III and Erik K. Fritzell 15

EFFECTS OF NEST-SITE SELECTION ON DEPREDATION OF ARTIFICIAL NESTS ..... Richard H. Yahner and Richard A. Voytko 21

NUTRITIONAL VALUE OF ACORNS FOR RUFFED GROUSE ..... Frederick A. Servello and Roy L. Kirkpatrick 26

WINTER USE OF AGRICULTURAL HABITATS BY WILD TURKEYS IN MASSACHUSETTS ..... W. Matthew Vander Haegen, Mark W. Sayre, and Wendell E. Dodge 30

HABITAT USE BY FEMALE EASTERN WILD TURKEYS IN SOUTHEASTERN OKLAHOMA ..... Terrence G. Bidwell, Scott D. Shalaway, O. Eugene Maughan, and Larry G. Talent 34

MOVEMENTS AND ACTIVITY PATTERNS OF THE LIGHT-FOOTED CLAPPER RAIL ..... Richard Zembal, Barbara W. Massey, and Jack M. Fancher 39

AGE OF SEXUAL MATURITY OF SANDHILL CRANES FROM MID-CONTINENTAL NORTH AMERICA ..... Thomas C. Tacha, Donald E. Haley, and Paul A. Vohs 43

DIET AND OPTIMAL FORAGING OF GREAT GRAY OWLS ..... Evelyn L. Bull, Mark G. Henjum, and Ronald S. Rohweder 47

NEST-SITE CHARACTERISTICS OF WHITE-HEADED WOODPECKERS ..... Kathleen A. Milne and Sallie J. Hejl 50

ANTHRANILATE REPELLENCY TO STARLINGS: CHEMICAL CORRELATES AND SENSORY PERCEPTION ..... J. Russell Mason, Michael A. Adams, and Larry Clark 55

RESPONSE OF SONGBIRDS TO GLYPHOSATE-INDUCED HABITAT CHANGES ON CLEARCUTS ..... David J. Santillo, Patrick W. Brown, and David M. Leslie, Jr. 64

FEEDING AND CHICK-REARING AREAS OF COMMON LOONS ..... Paul I. V. Strong and John A. Bissonette 72

A MINIMAL-STRESS BIRD-CAPTURE TECHNIQUE ..... Rory P. Wilson and Marie-Pierre T. J. Wilson 77

BODY COMPOSITION AND WEIGHT DYNAMICS OF WINTERING GREATER WHITE-FRONTED GEESE ..... Craig R. Ely and Dennis G. Raveling 80

NEST-PREDATION RATES IN RELATION TO COLONY SIZE OF BLACK BRANT ..... Dennis G. Raveling 87

ESTIMATED SURVIVAL RATES OF CANADA GEESE WITHIN THE ATLANTIC FLYWAY ..... Jay B. Hestbeck and Richard A. Malecki 91

AGE-RELATED RECRUITMENT OF CANADA GEESE FROM THE MISSISSIPPI VALLEY POPULATION ..... Joel D. Hardy and Thomas C. Tacha 97

WINTER SURVIVAL OF FEMALE AMERICAN BLACK DUCKS ON THE ATLANTIC COAST ..... Michael J. Conroy, Gary R. Costanzo, and Daniel B. Stotts 99

MOTTLED DUCK HABITAT USE AND DENSITY INDICES IN AGRICULTURAL LANDS ..... Phillip J. Zwank, Paul M. McKenzie, and E. Barry Moser 110

SURVIVAL RATES OF HAND-REARED MALLARDS RELEASED ON 2 PRIVATE FARMS ..... Edward C. Soutiere 114

SURVIVAL AND RECOVERY RATES OF YELLOW-BILLED DUCKS ..... W. R. J. Dean and D. M. Skead 119

ESTIMATING CARCASS FAT AND PROTEIN IN NORTHERN PINTAILS DURING THE NONBREEDING SEASON ..... Michael R. Miller 123

EFFECTS OF HABITAT CHARACTERISTICS ON GADWALL NEST PREDATION AND NEST-SITE SELECTION ..... Robert L. Crabtree, Linda S. Broome, and Michael L. Wolfe 129

GENERALIZED PROCEDURES FOR TESTING HYPOTHESES ABOUT SURVIVAL OR RECOVERY RATES ..... John R. Sauer and Byron K. Williams 137

SEASONAL ABUNDANCE OF WASTE CORN AND SOYBEANS IN ILLINOIS ..... Richard E. Warner, Stephen P. Havera, Larry M. David, and Richard J. Siemers 142

CHARACTERISTICS OF BALD EAGLE NEST SITES IN OREGON ..... Robert G. Anthony and Frank B. Isaacs 148

INFLUENCE OF DIET ON PLASMA VITAMIN E IN CAPTIVE PEREGRINE FALCONS ..... Ellen S. Dierenfeld, Calvin E. Sandfort, and William C. Satterfield 160

RESPONSES OF SMALL MAMMALS AND HABITAT TO GLYPHOSATE APPLICATION ON CLEARCUTS ..... David J. Santillo, David M. Leslie, Jr., and Patrick W. Brown 164

USE OF HALOTHANE TO ANAESTHETIZE MUSKRATS IN THE FIELD ... Pierre Blanchette 172

POPULATION DYNAMICS OF COYOTES IN SOUTHEASTERN COLORADO ..... Eric M. Gese, Orrin J. Rongstad, and William R. Mytton 174

SPATIAL RELATIONSHIPS BETWEEN COYOTES AND RED FOXES IN EASTERN MAINE ..... Daniel J. Harrison, John A. Bissonette, and James A. Sherburne 181

AN ESTIMATE OF MINIMUM DENSITY FOR COYOTES IN WESTERN TENNESSEE ..... Jeffrey G. Babb and Michael L. Kennedy 186

ESTIMATING THE WEIGHT OF POLAR BEARS FROM BODY MEASUREMENTS ..... George B. Kolenosky, Nicholas J. Lunn, Craig J. Greenwood, and Kenneth F. Abraham 188

WINTER RESTING SITE ECOLOGY OF MARTEN IN THE CENTRAL ROCKY MOUNTAINS ..... Steven W. Buskirk, Steven C. Forrest, Martin G. Raphael, and Henry J. Harlow 191

INFLUENCES OF SEASONS ON BOBCATS IN IDAHO ..... Gary M. Koehler and Maurice G. Hornocker 197

METABOLIC RATE OF BOBCATS AS INFLUENCED BY SEASONAL TEMPERATURES ..... William W. Mautz and Peter J. Pekins 202

BODY CONDITION INDICES FOR MALNOURISHED COLLARED PECCARIES ..... Robert L. Lochmiller, Eric C. Hellgren, Larry W. Varner, K. McBee, and W. E. Grant 205

EVALUATION OF FORAGE PREFERENCE INDICES FOR WHITE-TAILED DEER ..... Gary Van Vreede, Lisa C. Bradley, Fred C. Bryant, and Thomas J. Deliberto 210

EFFECT OF COMPOSITING SAMPLES ON ANALYSIS OF FECAL NITROGEN ..... Jonathan A. Jenks, David M. Leslie, Jr., Robert L. Lochmiller, M. Anthony Melchiors, and William D. Warde 213

NITROGEN AND DIAMINOPIMELIC ACID IN DEER AND MOOSE FECES ..... David M. Leslie, Jr., Jonathan A. Jenks, MaryEllen Chilelli, and Gerald R. Lavigne 216

ACTIVITY AND MOVEMENTS OF FEMALE WHITE-TAILED DEER DURING THE RUT ..... Stefan Hölzenbein and Georg Schwede 219

ARTIFICIAL INSEMINATION TRIALS WITH WHITE-TAILED DEER ..... Harry A. Jacobson, H. Joe Bearden, and David B. Whitehouse 224

LORAN-C: A NAVIGATION AID FOR AERIAL SURVEYS ..... Arnold H. Boer, Gerald Redmond, and Thomas J. Pettigrew 228

HABITAT USE BY WOODLAND CARIBOU IN THE SELKIRK MOUNTAINS ..... Gregg Servheen and L. Jack Lyon 230

EARLY-WINTER HABITAT OF WOODLAND CARIBOU, SELKIRK MOUNTAINS, BRITISH COLUMBIA ..... Eric M. Rominger and John L. Oldemeyer 238

WOLF PREDATION ON THE NELCHINA CARIBOU HERD: A COMMENT ..... V. Van Ballenberghe 243

WOLF PREDATION ON THE NELCHINA CARIBOU HERD: A REPLY ..... A. T. Bergerud and W. B. Ballard 251

SURVIVAL OF MALE BIGHORN SHEEP IN SOUTHWESTERN ALBERTA ..... Marco Festa-Bianchet 259

DIEL ACTIVITY OF FEMALE DESERT BIGHORN SHEEP IN WESTERN ARIZONA ..... Jay A. Alderman, Paul R. Krausman, and Bruce D. Leopold 264

Book Reviews 272
Editorial 275

NUMBER 2—APRIL

RESOURCE PARTITIONING BETWEEN SEXES IN WHITE-TAILED DEER ..... Dale R. McCullough, David H. Hirth, and Stephen J. Newhouse 277
PHYSIOLOGICAL ASSESSMENT OF DEER POPULATIONS BY ANALYSIS OF URINE IN SNOW ..... Glenn D. DelGiudice, L. David Mech, and Ulysses S. Seal 284
CUMULATIVE EFFECT OF WINTER ON ACORN YIELD AND DEER BODY WEIGHT ..... George A. Feldhamer, Thomas P. Kilbane, and Dennis W. Sharp 292
SEASONAL ACTIVITY BUDGETS OF MOOSE IN ASPEN-DOMINATED BOREAL FORESTS ..... Lyle A. Renecker and Robert J. Hudson 296
PRONGHORN USE OF RECENTLY BURNED MIXED PRAIRIE IN ALBERTA ..... Rick F. Courtney 302
POPULATION CHARACTERISTICS OF FERAL SHEEP ON SANTA CRUZ ISLAND ..... Dirk Van Vuren and Bruce E. Coblentz 306
MULE DEER HABITAT USE RELATED TO SUCCESSION IN A BUNCHGRASS COMMUNITY ..... Timothy S. Bodurtha, James M. Peek, and Jerry L. Lauer 314
EFFECTS OF INTRAPERITONEAL TRANSMITTER IMPLANTS ON YELLOW-BELLIED MARMOTS ..... Dirk Van Vuren 320
MOVEMENTS AND HABITAT USE OF FRANKLIN'S GROUND SQUIRRELS IN DUCK-NESTING HABITAT ..... Jane Choromanski-Norris, Erik K. Fritzell, and Alan B. Sargeant 324
USE OF METHOXYFLURANE TO SURGICALLY IMPLANT TRANSMITTERS IN MUSKRATS ..... Michael J. Lacki, Paige N. Smith, William T. Peneston, and F. Daniel Vogt 331
CHANGES IN COYOTE MOVEMENTS DUE TO MILITARY ACTIVITY ..... Eric M. Gese, Orrin J. Rongstad, and William R. Mytton 334
OBSERVER PERFORMANCE IN KNOWN AND BLIND RADIO-TELEMETRY ACCURACY TESTS ..... L. Scott Mills and Frederick F. Knowlton 340
ASSESSING THE DIET OF DINGOES FROM FECES: A COMPARISON OF 3 METHODS ..... Laurence K. Corbett 343
DENNING ECOLOGY OF BLACK BEARS IN A SOUTHEASTERN WETLAND ..... Eric C. Hellgren and Michael R. Vaughan 347
REPRODUCTION IN BLACK BEARS IN THE SOUTHERN APPALACHIAN MOUNTAINS ..... John H. Eiler, W. Gregory Wathen, and Michael R. Pelton 353
ESTIMATING BIAS IN AERIAL SURVEYS OF HARP SEAL PUP PRODUCTION ..... R. A. Myers and W. D. Bowen 361
SURVIVAL OF JUVENILE CANADA GEESE DURING THE REARING PERIOD ..... Lester E. Eberhardt, Robert G. Anthony, and William H. Rickard 372
WOOD DUCK NEST SITES IN BOTTOMLAND HARDWOOD FORESTS OF MISSISSIPPI ..... Martin S. Lowney and Edward P. Hill 378
A MODEL OF HABITAT USE BY BREEDING AMERICAN BLACK DUCKS ..... Duane R. Diefenbach and Ray B. Owen, Jr. 383
HABITAT USE AND MOVEMENTS OF AMERICAN BLACK DUCKS IN WINTER ..... John M. Morton, Roy L. Kirkpatrick, Michael R. Vaughan, and Dean F. Stauffer 390
TIME AND ENERGY BUDGETS OF AMERICAN BLACK DUCKS IN WINTER ..... John M. Morton, Ada C. Fowler, and Roy L. Kirkpatrick 401
USE OF EARTHEN ISLANDS BY NESTING DUCKS IN NORTH DAKOTA ..... Mark A. Willms and Richard D. Crawford 411
IMPAIRED REPRODUCTION OF MALLARDS FED AN ORGANIC FORM OF SELENIUM ..... Gary H. Heinz, David J. Hoffman, and Lyn G. Gold 418

MALLARD SURVIVAL FROM LOCAL TO IMMATURE STAGE IN SOUTHWESTERN SASKATCHEWAN ..... Jay B. Hestbeck, Alexander Dzubin, J. Bernard Gollop, and James D. Nichols 428

BODY WEIGHT AND COMPOSITION DYNAMICS OF FALL MIGRATING CANVASBACKS ..... Jerome R. Serie and David E. Sharp 431

CHARACTERISTICS OF BALD EAGLE NESTING HABITAT IN FLORIDA ..... Petra Bohall Wood, Thomas C. Edwards, Jr., and Michael W. Collopy 441

IDENTIFICATION OF INDIVIDUAL BREEDING BALD EAGLES BY VOICE ANALYSIS ..... Wade L. Eakle, R. William Mannan, and Teryl G. Grubb 450

HAY CUTTING AND THE SURVIVAL OF PHEASANTS: A LONG-TERM PERSPECTIVE ..... Richard E. Warner and Stanley L. Etter 455

HABITAT USE AND MOVEMENTS OF FEMALE RING-NECKED PHEASANTS DURING FALL AND WINTER ..... Ronald C. Gatti, Robert T. Dumke, and Charles M. Pils 462

EVALUATION OF A DENSITY INDEX FOR TERRITORIAL MALE SPRUCE GROUSE ..... Michael A. Schroeder and David A. Boag 475

BROOD HABITAT USE BY EASTERN WILD TURKEYS IN EASTERN TEXAS ..... Joseph J. Campo, Wendell G. Swank, and Curtis R. Hopkins 479

ATTENDANCE PATTERNS OF MURRES AT BREEDING SITES: IMPLICATIONS FOR MONITORING ..... Scott A. Hatch and Martha A. Hatch 483

NONGAME BIRD COMMUNITY RESPONSES TO SAGEBRUSH INVASION OF CRESTED WHEATGRASS SEEDINGS ..... J. Kent McAdoo, William S. Longland, and Raymond A. Evans 494

AGE ESTIMATES FOR SNAPPING TURTLES ... David A. Galbraith and Ronald J. Brooks 502

Editorial News 508

Book Reviews 509

NUMBER 3—JULY

MORTALITY OF ADULT MALE WHITE-TAILED DEER IN SOUTH TEXAS ..... Charles A. DeYoung 513

AGING LIVE WHITE-TAILED DEER ON SOUTHERN RANGES ..... Charles A. DeYoung 519

IMPACTS OF WHITE-TAILED DEER ON FOREST REGENERATION IN NORTHWESTERN PENNSYLVANIA ..... Nancy G. Tilghman 524

SEASONAL CHANGES IN PHYSIOLOGICAL PARAMETERS OF WHITE-TAILED DEER IN OKLAHOMA ..... Thomas J. DeLiberto, James A. Pfister, Stephen Demarais, and Gary Van Vreede 533

DEER AND CATTLE DIETS ON HEAVILY GRAZED PINE-BLUESTEM RANGE ..... Ronald E. Thill and Alton Martin, Jr. 540

CAUSES AND RATE OF MOOSE MORTALITY IN THE SOUTHWEST YUKON ..... Douglas G. Larsen, David A. Gauthier, and Rhonda L. Markel 548

SURVIVAL RATES OF ADULT FEMALE MOOSE ON THE KENAI PENINSULA, ALASKA ..... Edward E. Bangs, Theodore N. Bailey, and Mary F. Portner 557

EFFECTS OF CAPTURING PREGNANT MOOSE AND CALVES ON CALF SURVIVORSHIP ..... Douglas G. Larsen and David A. Gauthier 564

COMPOSITION AND QUALITY OF MOOSE WINTER DIETS IN INTERIOR ALASKA ..... Kenneth L. Risenhoover 568

IMPACT OF BARK STRIPPING BY MOOSE ON ASPEN–SPRUCE COMMUNITIES ..... Dale G. Miquelle and Victor Van Ballenberghe 577

SEASONAL VARIATION IN MANDIBLE MARROW FAT IN MOOSE ..... Göran N. Cederlund, Roger L. Bergström, and Kjell Danell 587

COMPARISON OF BISON POPULATION ESTIMATES WITH A TOTAL COUNT ..... Michael L. Wolfe and John F. Kimball 593

COMPOSITION AND VARIABILITY OF DESERT BIGHORN SHEEP DIETS ..... Gary D. Miller and William S. Gaud 597

IN VIVO AND IN VITRO DIGESTIBILITIES FOR COLLARED PECCARIES ..... Otto F. Strey III and Robert D. Brown 607

SEASONAL REPRODUCTIVE ACTIVITY OF 4 EXOTIC UNGULATES IN TEXAS ..... Larry D. Howery, James A. Pfister, and Stephen Demarais 613

ANTLER CHARACTERISTICS IN A COLONIZING ELK POPULATION ..... Scott M. McCorquodale, Lester E. Eberhardt, and Glen A. Sargeant 618

DETERMINING ELK DISTRIBUTION WITH PELLET-GROUP AND TELEMETRY TECHNIQUES ..... W. Daniel Edge and C. Les Marcum 621

EVALUATION OF AERIAL LINE TRANSECTS FOR ESTIMATING MULE DEER DENSITIES ..... Gary C. White, Richard M. Bartmann, Len H. Carpenter, and Robert A. Garrott 625

MULE DEER USE OF SERAL STAGE AND HABITAT TYPE IN BITTERBRUSH COMMUNITIES ..... Brad Griffith and James M. Peek 636

BROWSE AVAILABILITY AFTER CONIFER RELEASE IN MAINE'S SPRUCE-FIR FORESTS .... Michael Newton, Elizabeth C. Cole, R. A. Lautenschlager, Diane E. White, and M. L. McCormack, Jr. 643

USE OF HABITAT BY MOUNTAIN BEAVER IN THE SIERRA NEVADA ..... Paul Beier 649

SIZE-SELECTIVE PREDATION ON UNIONID CLAMS BY MUSKRATS ..... Laurie E. Convey, John Mark Hanson, and William C. Mackay 654

TOWARDS AN ACOUSTIC BIOTELEMETRY SYSTEM FOR ANIMAL BEHAVIOR STUDIES ..... Philip U. Alkon, Yosef Cohen, and Peter A. Jordan 658

COYOTE PREY CHOICE: OPTIMAL OR OPPORTUNISTIC FORAGING? A COMMENT ... Stan Boutin and H. Dean Cluff 663

COYOTE PREY CHOICE: A REPLY ..... James G. MacCracken 666

FEMALE BALCK BEAR HABITAT USE IN WEST-CENTRAL IDAHO ..... James W. Unsworth, John J. Beecham, and Lynn R. Irby 668

HOME RANGE CHARACTERISTICS OF ADULT FISHERS ..... Stephen M. Arthur, William B. Krohn, and James R. Gilbert 674

HABITAT USE AND DIET OF FISHERS ..... Stephen M. Arthur, William B. Krohn, and James R. Gilbert 680

WINTER FOODS OF FISHERS DURING A SNOWSHOE HARE DECLINE ..... David W. Kuehn 688

MANATEE RESPONSE TO INTERRUPTION OF A THERMAL EFFLUENT ..... Jane M. Packard, R. Kipp Frohlich, John E. Reynolds III, and J. Ross Wilcox 692

HABITAT CONTINUITY AND SOCIAL ORGANIZATION OF THE MOUNTAIN PYGMY-POSSUM RESTORED BY TUNNEL ..... Ian M. Mansergh and David J. Scotts 701

GROUND NESTING BY BLACK-BELLIED WHISTLING DUCKS ON ISLANDS IN MEXICO Darrell E. Markum and Guy A. Baldassarre 707

RESPONSES OF STAGING GREATER SNOW GEESE TO HUMAN DISTURBANCE ..... Luc Bélanger and Jean Bédard 713

AUTUMN USE OF IZEMBEK LAGOON, ALASKA, BY BRANT FROM DIFFERENT BREEDING AREAS ..... Austin Reed, Robert Stehn, and David Ward 720

APPARENT METABOLIZABILITY OF ALFALFA COMPONENTS BY YEARLING PACIFIC BLACK BRANT ..... James S. Sedinger, Robert G. White, Frances E. Mann, Frank A. Burris, and Richard A. Kedrowski 726

AGE-SPECIFIC BREEDING RATES OF FEMALE INTERIOR CANADA GEESE ..... Timothy J. Moser and Donald H. Rusch 734

MOVEMENT AND HABITAT USE BY GREAT BASIN CANADA GOOSE BROODS ..... Lester E. Eberhardt, Robert G. Anthony, and William H. Rickard 740

MARK–RESIGHT ESTIMATE OF CANADA GOOSE MIDWINTER NUMBER ..... Jay B. Hestbeck and Richard A. Malecki 749

ACTIVITY BUDGET OF GREEN-WINGED TEAL WINTERING IN COASTAL WETLANDS OF LOUISIANA ..... David P. Rave and Guy A. Baldassarre 753

MONITORING WILD BIRD POPULATIONS FOR LEAD EXPOSURE .. A. M. Scheuhammer 759

TESTS OF DIET AND CONDITION BIAS IN HUNTER-KILLED NORTHERN PINTAILS ..... Douglas G. Sheeley and Loren M. Smith 765

TIME-ACTIVITY BUDGETS OF DIVING DUCKS WINTERING IN SOUTH CAROLINA ..... James F. Bergan, Loren M. Smith, and John J. Mayer 769

EFFECTS OF DIET ON SELENIUM BIOACCUMULATION IN MARSH BIRDS ..... Paul J. DuBowy 776

HABITAT USE AND HOME RANGES OF BLACK AND TURKEY VULTURES ..... John S. Coleman and James D. Fraser 782

RELATIONSHIP OF DIETS AND ENVIRONMENTAL CONTAMINANTS IN WINTERING BALD EAGLES ..... Richard W. Frenzel and Robert G. Anthony 792

HOME-RANGE ESTIMATES OF RED-TAILED HAWKS BASED ON RANDOM AND SYSTEMATIC RELOCATIONS ..... David E. Andersen and Orrin J. Rongstad 802

SURVIVAL OF RING-NECKED PHEASANTS WITH BACKPACKS, NECKLACES, AND LEG BANDS ..... Vidar Marcström, Robert E. Kenward, and Mats Karlbom 808

MINERAL PROFILES OF SPRUCE GROUSE FEATHERS SHOW HABITAT AFFINITIES ..... Gary R. Bortolotti, Kandyd J. Szuba, Brian J. Naylor, and James F. Bendell 811

CROP WEIGHTS USED TO ADJUST BODY WEIGHTS OF LIVE SPRUCE GROUSE ..... Roxanne M. Comeau and Daniel M. Keppie 818

HABITAT DIFFERENCES BETWEEN PERENNIAL AND TRANSIENT DRUMMING SITES OF RUFFED GROUSE ..... Frank R. Thompson III and Erik K. Fritzell 820

TOPOGRAPHIC DISTRIBUTION OF SAGE GROUSE FORAGING IN WINTER ..... Jerry W. Hupp and Clait E. Braun 823

MOVEMENTS AND HOME RANGES OF FLORIDA SANDHILL CRANES .. Alan J. Bennett 830

AVOIDANCE OF METHIOCARB-POISONED APPLES BY RED-WINGED BLACKBIRDS ..... J. Russell Mason 836

MATURATIONAL AND VARIETAL INFLUENCES ON SUNFLOWER CONSUMPTION BY RED-WINGED BLACKBIRDS ..... J. Russell Mason, Richard A. Dolbeer, Paul P. Woronecki, and Roger W. Bullard 841

USE OF PRESENCE-ABSENCE TO MEASURE CHANGES IN AVIAN DENSITY ..... Jonathan Bart and Steven P. Klosiewski 847

CAGING AS A TECHNIQUE FOR REARING WILD PASSERINE BIRDS ..... Richard de Hamel and Ian G. McLean 852

Corrigendum 856

Book Reviews 857

NUMBER 4—OCTOBER

POPULATION RESPONSES OF BLACK-TAILED DEER TO PRESCRIBED BURNING ..... Robert C. Klinger, Michael J. Kutilek, and Howard S. Shellhammer 863

DISTRIBUTION AND MOVEMENTS OF FEMALE MULE DEER IN THE ROCKY MOUNTAIN FOOTHILLS ..... Roland C. Kufeld, David C. Bowden, and Donald L. Schrupp 871

INDUCED SCRAPING ACTIVITY IN WHITE-TAILED DEER ..... John J. Ozoga 877

SUMMER HOME RANGE AND HABITAT USE BY MOOSE IN NORTHERN MAINE ..... David J. Leptich and James R. Gilbert 880

FETAL SEX RATIOS IN CARIBOU: MATERNAL AGE AND CONDITION EFFECTS ..... Donald C. Thomas, Samuel J. Barry, and Hendrick P. Kiliaan 885

GENETIC VARIATION IN PRONGHORN FROM WEST TEXAS ..... Thomas E. Lee, Jr. James N. Derr, John W. Bickham, and Ted L. Clark 890

CALVING PATTERNS AMONG AMERICAN BISON .. James H. Shaw and Tracy S. Carter 896

PREGNANCY-SPECIFIC PROTEIN IN THE PLASMA OF CAPTIVE MUSKOXEN ..... Janice E. Rowell, Peter F. Flood, Carla A. Ruder, and Garth Sasser 899

MOUNTAIN SHEEP HABITAT CHARACTERISTICS IN THE PUSCH RIDGE WILDERNESS, ARIZONA ..... Richard C. Etchberger, Paul R. Krausman, and Rosemary Mazzaika 902

EVALUATION OF AERIAL MARK-RESIGHTING ESTIMATES OF ELK POPULATIONS ... George D. Bear, Gary C. White, Len H. Carpenter, R. Bruce Gill, and David J. Essex 908

REPRODUCTIVE RATES OF FERAL HORSES AND BURROS ... Michael L. Wolfe, Legrande C. Ellis, and Robert MacMullen 916

CONDITION IN CHAMOIS POPULATIONS UNDER DIFFERENT HARVEST LEVELS IN BAVARIA ... Ilse Storch 925

PREDICTING BEAVER COLONY DENSITY IN BOREAL LANDSCAPES ... Michael R. Broschart, Carol A. Johnston, and Robert J. Naiman 929

MUSKRAT PREDATION ON ENDANGERED FRESHWATER MUSSELS IN VIRGINIA ... Richard J. Neves and Michael C. Odom 934

STUDYING FINE-SCALE HABITAT USE IN SMALL MAMMALS ... Numi C. Goodyear 941

A RADIO-TRACKING SYSTEM FOR SUBTERRANEAN RODENTS ... Rony Rado and Joseph Terkel 946

SLOW-RELEASE RADIOISOTOPE IMPLANTS AS INDIVIDUAL MARKERS FOR CARNIVORES ... Robert L. Crabtree, Frederick G. Burton, Thomas R. Garland, Dominic A. Cataldo, and William H. Rickard 949

HABITAT USE AND MOVEMENTS OF DESERT KIT FOXES IN WESTERN ARIZONA ... Bruce W. Zoellick, Norman S. Smith, and Robert S. Henry 955

FACTORS AFFECTING BLACK BEAR REPRODUCTIVE SUCCESS AND CUB SURVIVAL Kenneth D. Elowe and Wendell E. Dodge 962

DEMOGRAPHIC ANALYSIS OF A BLACK BEAR POPULATION IN THE GREAT DISMAL SWAMP ... Eric D. Hellgren and Michael R. Vaughan 969

IMMOBILIZATION OF GRIZZLY BEARS WITH TILETAMINE HYDROCHLORIDE AND ZOLAZEPAM HYDROCHLORIDE ... William P. Taylor, Harry V. Reynolds, III, and Warren B. Ballard 978

VITAL STATISTICS AND HARVEST OF AN IOWA RACCOON POPULATION ... William R. Clark, James J. Hasbrouck, James M. Kienzler, and Thomas F. Glueck 982

MOVEMENTS AND HABITAT USE BY TRANSPLANTED MARTEN IN THE YUKON TERRITORY ... Brian G. Slough 991

ANALYSIS OF VARIABILITY IN HOME-RANGE SIZE OF THE AMERICAN MARTEN ... Steven W. Buskirk and Lyman L. McDonald 997

NUTRIENT AND ENERGY ASSIMILATION OF PREY BY BOBCATS ... Jeffrey G. Powers, William W. Mautz, and Peter J. Pekins 1004

INVESTIGATING OBSERVER BIAS IN AERIAL SURVEY BY SIMULTANEOUS DOUBLE-COUNTS ... Alistair Graham and Richard Bell 1009

CORRECTING FOR VISIBILITY BIAS IN STRIP TRANSECT AERIAL SURVEYS OF AQUATIC FAUNA ... H. Marsh and D. F. Sinclair 1017

NESTING ECOLOGY AND MANAGEMENT OF THE ARCTIC LOON IN SWEDEN ... Frank Götmark, Raimo Neergaard, and Matti Åhlund 1025

DDE, SELENIUM, MERCURY, AND WHITE-FACED IBIS REPRODUCTION AT CARSON LAKE, NEVADA ... Charles J. Henny and Gary B. Herron 1032

STATUS, DISTRIBUTION, AND FOODS OF FULVOUS WHISTLING-DUCKS IN SOUTH FLORIDA ... Richard E. Turnbull, Fred A. Johnson, and David H. Brakhage 1046

PESTICIDE RESIDUES IN FULVOUS WHISTLING-DUCKS FROM SOUTH FLORIDA ... Richard E. Turnbull, Fred A. Johnson, Maria de los A. Hernandez, Willis B. Wheeler, and John P. Toth 1052

SURVIVAL AND MOVEMENTS OF MOLTING MALE BLACK DUCKS IN LABRADOR ... Timothy D. Bowman and Jerry R. Longcore 1057

DETERMINATION OF MALLARD AND BLACK DUCK HYBRIDS FROM WING FEATHERS ... Gregory G. Barnes 1061

INCREASING MALLARDS, DECREASING AMERICAN BLACK DUCKS—NO EVIDENCE FOR CAUSE AND EFFECT: A COMMENT ... Michael J. Conroy, Gregory G. Barnes, Raymond W. Bethke, and Thomas D. Nudds 1065

INCREASING MALLARDS, DECREASING AMERICAN BLACK DUCKS—NO EVIDENCE FOR CAUSE AND EFFECT: A REPLY ..... C. Davison Ankney, Darrell G. Dennis, and Robert C. Bailey. 1072

HABITAT USE BY MALLARDS DURING SPRING MIGRATION THROUGH CENTRAL IOWA ..... Theodore G. LaGrange and James J. Dinsmore 1076

WINTER BODY-WEIGHT PATTERNS OF FEMALE MALLARDS FED AGRICULTURAL SEEDS ..... Charles R. Loesch and Richard M. Kaminski 1081

RELATIONSHIPS OF POPULATION SIZE AND RECRUITMENT OF PINTAILS TO HABITAT CONDITIONS AND HARVEST ..... Dennis G. Raveling and Mickey E. Heitmeyer 1088

HOMING OF ANATIDS DURING THE NONBREEDING SEASON TO THE SOUTHERN HIGH PLAINS ..... Alan M. Fedynich, Ralph D. Godfrey, Jr., and Eric G. Bolen 1104

RADIUM-226 IN WETLAND BIRDS FROM FLORIDA PHOSPHATE MINES ..... Orrin B. Myers, Wayne R. Marion, Timothy E. O'Meara, and Charles E. Roessler 1110

DIFFERENTIAL HABITAT USE BY DIVING DUCKS WINTERING IN SOUTH CAROLINA ..... James F. Bergan, and Loren M. Smith 1117

DECLINE OF A FERRUGINOUS HAWK POPULATION: A 20-YEAR SUMMARY ..... Neil D. Woffinden and Joseph R. Murphy 1127

TEST OF A DENSITY INDEX ASSUMPTION FOR GRAY PARTRIDGE: A COMMENT ..... Fred S. Guthery 1132

TEST OF A DENSITY INDEX ASSUMPTION FOR GRAY PARTRIDGE: A REPLY ..... John T. Ratti and Jay J. Rotella 1133

EFFECTS OF EDGE CONTRAST ON DEPREDATION OF ARTIFICIAL AVIAN NESTS. ..... Richard H. Yahner, Thomas E. Morrell, and Jon S. Rachael 1135

EFFECTS OF ORGANOPHOSPHORUS INSECTICIDES ON SAGE GROUSE IN SOUTHEASTERN IDAHO ..... Lawrence J. Blus, Chris S. Staley, Charles J. Henny, Grey E. Pendleton, Tim H. Craig, Erica H. Craig, and Douglas K. Halford 1139

AN ASSESSMENT OF AMERICAN COOT HERBIVORY OF HYDRILLA ..... Daniel Esler 1147

WINTER DIETS OF WHOOPING AND SANDHILL CRANES IN SOUTH TEXAS ..... Howard E. Hunt and R. Douglas Slack 1150

EFFECTS OF RADIO PACKAGES ON GREAT SNIPE DURING BREEDING ..... John Atle Kålås, Lars Løfaldli, and Peder Fiske 1155

HOME-RANGE CHARACTERISTICS OF SPOTTED OWLS IN NORTHERN ARIZONA ..... Joseph L. Ganey and Russell P. Balda 1159

SNAG AVAILABILITY AND CAVITY NESTING BIRDS IN SLASH PINE PLANTATIONS ..... Darrell Land, Wayne R. Marion, and Timothy E. O'Meara 1165

MORE ON GAINING RELIABLE KNOWLEDGE: A COMMENT ..... William J. Matter and R. William Mannan 1172

MORE ON GAINING RELIABLE KNOWLEDGE: A REPLY ..... H. Charles Romesburg 1177

CORRIGENDUM 1181

Editorial News 1182

Book Reviews 1183

INDEX 1188